

**REMARKS**

**I. Status of the Claims**

No claims have been amended herein.

Claims 67, 69-76, 82-91, 96-102, and 104-119 are pending and subject to examination upon entry of this paper.

**II. Interview Summary**

Applicants thank Examiners Love and Examiner Blanchard for the courtesy extended in the interview with Applicants' representatives on October 26, 2010.

M.P.E.P. 713.04 provides eight items (A-H) that should be addressed in Applicants' submission of the substance of the interview. Applicants' submissions regarding each of those items are as follow:

- (A) No exhibit was shown and no demonstration was conducted at the interview.
- (B) All of the claims were generally discussed.
- (C) The interview included a discussion of the references US 6,153,206 to Anton et al. (Anton), and FR 2140977 to Toniu (Toniu).
- (D) None.
- (E) Applicants' representatives discussed with the examiners the non-obviousness of the currently pending claims over Anton, Toniu and other references cited in the outstanding Office Action. Applicants' representatives argued that an ordinary skill is capable of identifying a diblock, triblock, or random copolymers.
- (F) None.

(G) None.

(H) This interview was in person with Jill K. MacAlpine, with Wen Li's participation via telephone, so this item does not apply.

The Examiner provided Applicants' representatives with an Examiner's Interview Summary on October 26, 2010.

### **III. Information Disclosure Statement**

The Office states that the Information Disclosure Statement submitted on May 26, 2010 fails to comply with 37 CFR 1.98(a)(2), thereby has not been considered. Specifically, the Office crossed through the cited co-pending U.S. applications and the Office Actions issued therein. Copies of such documents are submitted herewith.

### **IV. Claim Rejections - 35 U.S.C. § 102**

Claims 67, 69-76, 82-91, 96, 97, 101, 102, and 104-119 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,153,206 to Anton et al. (Anton). Office Action at pages 3-6. Applicants respectfully disagree and traverse this rejection.

To properly anticipate Applicants' claimed invention under 35 U.S.C. § 102, each and every element of the claim in issue must be found, "either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added).

Here in this case, the instant claims recite, *inter alia*, a linear block polymer having "a polydispersity index of greater than or equal to 2.5". The Office has correctly recognized that Anton is silent as to the polydispersity index. The Office, however,

argues that "it is the position of the Examiner that absent evidence to the contrary, the compositions being similar, if not the same, would necessarily have a percent transfer and polydispersity index which are similar, if not the same." The Office thus appears to rely on the theory of inherency to support the 102 rejection.

However, the Office's arguments are unfounded. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). MPEP 2112(IV). The Office fails to provide a sound basis and/or technical reasoning but for the above cited conclusory statement.

Moreover, assuming arguendo that Anton teaches a block polymer using similar monomers as those used in the instant application, Anton does not necessarily teach a block polymer with a polydispersity index of greater than or equal to 2.5 as currently claimed. As indicated in the Declaration under 37 C.F.R. § 1.132 filed April 22, 2010, polymers with similar monomer contents can have polydispersity indexes that are substantially different from each other. As such, Applicants have provided "evidence to the contrary" as requested by the Office, and the Office's reliance on the theory of inherency should fail. Since the declaration is effective in proving there is no *prima facie* case of inherency as alleged by the Office, the Office's argument regarding the scope of evidence bears no weight.

Indeed, as discussed in the response submitted previously, Anton describes that Group Transfer Polymerization (GTP) technique can be used to prepare the polymers.

See lines 63-65, col. 5, and lines 65-67, col. 11. However, GTP<sup>1</sup> is one of the main living polymerization techniques<sup>2</sup> that are known to prepare polymers with a polydispersity index close to 1.

For the foregoing reasons, Applicants respectfully request that this rejection be withdrawn.

**V. Claim Rejections - 35 U.S.C. § 103(a)**

**A. Anton and Hosotte-Filbert**

Claims 98-100 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Anton in view of U.S. Patent No. 5,681,877 to Hosotte-Filbert et al. (Hosotte-Filbert) for reasons set forth at pages 6-8 of the Office Action. Applicants respectfully disagree and traverse this rejection.

As discussed above, Anton does not teach or suggest the polydispersity index as currently claimed. The Office relies on Hosotte-Filbert for the teaching of “a block copolymer which comprises blocks of acrylic (or methacrylic) acid and methyl methacrylate”. As in Anton, Hosotte-Filbert is silent on polydispersity index, and Hosotte-Filbert also does not teach or suggest that the segment linking the first and second blocks is a random block. As such, Hosotte-Filbert does not rectify Anton’s deficiencies.

Thus, Anton and Hosotte-Filbert fail to render obvious the current claims as amended. Accordingly, Applicants respectfully request that the rejection be withdrawn.

**B. Toniu and Aldrich**

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<sup>1</sup> <http://www.statemaster.com/encyclopedia/Living-polymerization>

<sup>2</sup> <http://www.statemaster.com/encyclopedia/Polydispersity-index>

Claims 67, 69-76, 82-84, 87-89, 91, 96, 99, 106, 107, 111, 112, 114, and 115 are rejected under 35 U.S.C. § 103(a) as being unpatentable over FR 19730119 to Toniu et al. (Toniu) as evidenced by Aldrich for reasons set forth at pages 9-12 of the Office Action. Applicants respectfully disagree and traverse this rejection.

The Office has failed to establish a *prima facie* case of obviousness. Neither Toniu nor Aldrich teaches or suggest, for example, the claimed polydispersity index. There is no evidence that the polymers described by Toniu inherently have a polydispersity index greater than or equal to 2.5, as currently claimed. And Aldrich only describes the glass transition temperatures for certain homopolymers. Moreover, “[o]bviousness cannot be predicated on what is not known at the time an invention is made, even if the inherency of a certain feature is later established.” *In re Rijckaert*, 9 F.2d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993) MPEP 2141.02(V).

Thus, Toniu and Aldrich fail to render obvious the current claims as amended. Accordingly, Applicants respectfully request that the rejection be withdrawn.

### **C. Toniu, Aldrich, and Anton**

Claims 108-110 and 116-119 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Toniu as evidenced by Aldrich as applied to claims 67, 69-76, 82-84, 87-89, 91, 96, 99, 106, 107, 111, 112, 114, and 115 and further in view of Anton. Office Action at 12-14. Applicants respectfully disagree and traverse this rejection.

As discussed above, none of the three references teaches or suggests the claimed polydispersity index. Thus, the proposed combination of those references fails to render obvious the current claims as amended. Accordingly, Applicants respectfully request that the rejection be withdrawn.

## **VI. Double Patenting**

Claims 67, 70-76, 82-91, 96-102, 104-117, and 119 are provisionally rejected on the ground of obviousness-type double patenting as allegedly being unpatentable over:

- 1) claims 80, 82, 83, 92, 95, 104, 105, 110, 111, 130, 134-138, 140, 142-157, and 160-165 of copending Application No. 10/529,218; and
- 2) claims 77, 79, 80, 84, 87-94, 97-107, 111, 114, 123, 124, 129-131, 150, 154, 155, and 157-161 of copending Application No. 10/529,266. Office Action 14-17.

Applicants plan to file an appropriate terminal disclaimer when allowable subject matter is indicated.

## **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge  
any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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